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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,769	09/15/2003	Reinhold Fuessinger	080404.52663US	7277

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EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,769

Applicant(s)

FUESSINGER ET AL.

Examiner

Alexandra K Pechhold

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date filed 9/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims objected to because of the following informalities:
 - claims 16-21 recite "the bearings" when there is no antecedent basis, which makes the claim limitation confusing,
 - claims 7-10 recite "the transition area" when there is not antecedent basis for this limitation, making the claim confusing, and
 - in claim 23, line 8, it appears that "compromise" should be "comprise".

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-3, 7-23, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoegl (CH 666550).**

Regarding claim 1, Hoegl discloses a collapsible bridge, having two track girders, seen as walls (5) and (6) on both sides of the roadway (3) in Fig. 1, which are constructed as truss girders with a triangular cross-section, as shown in Figs. 1 and 3, wherein a chord profile is provided at each triangulation point,

Art Unit: 3671

and wherein two corners of the triangular cross-section are situated at the same level, as seen in Figs. 1 and 3, and the third corner is situated above the latter, at the location of top member (7) in Fig. 1, wherein, in each case, between one of the lower triangulation points and the upper triangulation point, a truss plane is formed comprising diagonal struts, the lower chord and the upper chord, as shown in Fig. 2, wherein lower and upper truss nodes respectively are formed at the points of the connection of two diagonal struts and a lower chord and an upper chord respectively,

- wherein the two track girders are force-lockingly connected by transverse girders, seen as (4) and (10),
- wherein roadway planks, seen as the roadway components (3), are provided which are aligned in the longitudinal direction of the bridge and are force-lockingly connected with the transverse girders,
- wherein the transverse girders are fitted completely through the track girders and are force-lockingly connected with the latter, as shown by the continuity in Fig. 1, so that the transverse girders fix the distance between the two truss planes on the bottom side of a track girder as well as the two track girders with respect to one another, wherein the transverse girders rest on the lower nodes of the two truss planes of a track girder and are force-lockingly connected with the latter, and
- wherein the two truss planes of a track girder are connected at the

Art Unit: 3671

upper triangulation point of the track girder cross-section by means of a hinge, so that, when the bridge is taken down, the track girders can be folded together, as shown in Fig. 1 by the phantom lines.

Regarding claim 2, Fig. 2 illustrates a longitudinal side of a lower chord situated at the lower triangulation points of a track girder being aligned parallel to the pertaining truss plane.

Regarding claim 3, Figs. 1 and 2 illustrate the claimed recitation.

Regarding claims 7-10, Fig. 1 shows the transverse girders bent at right angles at the transition are to the track girders.

Regarding claims 16-21, the track girders, seen as walls (5, 6), are coupled at their ends with end pieces, seen at the joints (34, 35) in Fig. 1, which form the bearings of the bridge.

Regarding claim 22, Hoegl discloses the limitations of the claimed invention as discussed in regards to claims 1 and 23.

Regarding claim 23, Hoegl discloses a collapsible bridge assembly comprising:

- truss girders, seen as walls (5) and (6), positioned in use on lateral sides of a bridge roadway formed by the bridge assembly,
- transverse girders, seen as (4) and (10), detachably connected with respective truss girders at opposite lateral sides of a bridge roadway, and
- roadway planks, seen as roadway (3),
- wherein the truss girders comprise:

Art Unit: 3671

- two track girders extending in use in respective truss planes forming two sides of a triangle, seen as walls (5, 6) in Fig. 1, with a base, seen where (10) is in Fig. 1, extending between lower ends of the track girders when in an in use assembled condition with transverse girders fitted through and positioning the lower ends with respect to one another, and
- a hinged connecting upper portions of the two track girders together to facilitating folding, as shown in Fig. 1 where the walls (5, 6) are brought together and folded inward.

Regarding claims 11-15 and 26, Figs. 1 and 2 show the walls (5, 6) coupled together in the longitudinal direction of the bridge from one or several track girder sections.

Regarding claims 27 and 28, the method of forming the bridge is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3671

5. Claims 4-6, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoegl (CH 666550) as applied to claims 1-3 and 23 above, and further in view of Scuero (US 2001/0002497). Hoegl fails to disclose the transverse girders and/or the roadway planks consisting of extruded, tube-shaped fiber composite materials. Scuero discloses a geocomposite for roads and bridges made of a fibers (see claims 9 and 10), the geomembrane being extruded (paragraph [0024]), which has the advantage of being flexible and cushioned, capable of conforming to the base and structural layers of the roads and bridges, and providing cushioning so as to dissipate stress loads to a level supportable by the base layer and thus alleviate load-related cracking, having sufficient porosity and allow vertical migration of water, and having beneficial thermal properties (paragraph [0008]-[0014]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the transverse girders and/or the roadway planks of Hoegl to be made of extruded, tube-shaped fiber composite materials as taught by Scuero, since Scuero states in paragraphs [0008]-[0014] the advantages of such material in bridges and roads, such as being flexible and cushioned, capable of conforming to the base and structural layers of the roads and bridges, and providing cushioning so as to dissipate stress loads to a level supportable by the base layer and thus alleviate load-related cracking, having sufficient porosity and allow vertical migration of water, and having beneficial thermal properties.

Art Unit: 3671

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
8/24/04